Jeffrey Reservoir 2010 Survey Summary



Nebraska Game and Parks Commission

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Overall, the Jeffrey Reservoir fishery is stable. Walleye appear to be more abundant than what was observed in 2008 and 2009. White bass numbers also appear to be more abundant with a higher density of 9-12 inch individuals. The white bass population has been exceptionally high since 2005 when compared to prior data. Wiper numbers in 2010 look to be somewhat decreased.

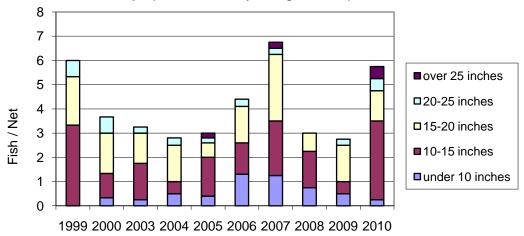
To create an unique fishery 25,000 sauger fingerlings were stocked in 2009 and in 2010 approximately 1 million fry were stocked. In 2011, 38,500 sauger fingerlings are requested to be stocked. This species is very similar to walleye and also provides fantastic table fare. Sauger are more adapted to flowing water and can be identified by their compressed shape and the presence of spots on the spinous dorsal fin. Sauger are generally smaller than walleye but should provide another angling opportunity especially for canal anglers. One sauger (presumably from the 2009 stocking) was sampled in 2010 at 13" in length. Access the online Fish Identification Tool for help in identifying sauger http://outdoornebraska.ne.gov/Fishing/guides/identification/default.asp.

On August 6, 2010 four cedar tree brush piles were placed in Jeffrey Reservoir by NGPC personnel. They are located near the WMA boat ramp (N 40.95418 / W 100.39901) and in the back of the largest west shore bay at (N 40.93616 / W 100.41567), (N 40.93686 / W 100.41508) and (N 40.93966 W 100.41743). These brush piles may congregate species such as white crappie, largemouth bass and prey species.

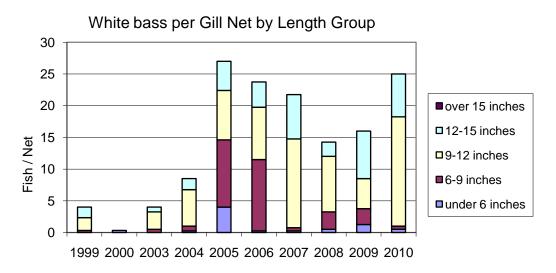
Take notice of fishing regulation changes at Jeffrey. The channel catfish daily bag limit as of January 1, 2011 is five and the possession limit is ten. Access the 2011-2012 fishing guide at http://outdoornebraska.ne.gov/Fishing/guides/fishguide/pdf/FishGuide.pdf or pick up a print copy at your local vendor or NGPC office.

The following text and graphs are the result of standard fisheries surveys conducted during 2009 and depict the number of fish sampled per net and the relative abundance of fish within several length categories. For comparative purposes it also shows results from previous years. Fish populations are sampled each fall at Jeffrey using gill nets, a method commonly used to sample fish found primarily in open water, such as walleye and white bass. These nets are set on approximately the same date and location each year to reduce variability and allow for trend comparisons of species abundance and size distributions. Environmental factors can play a role in catch rate and composition.



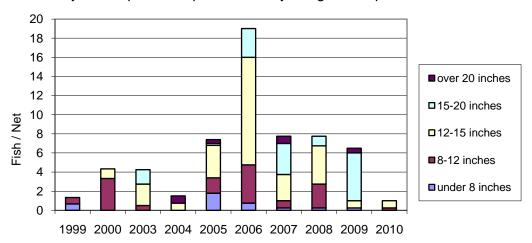


Catch rate of walleye at Jeffrey is consistently low compared to other reservoirs but the catch rate of walleye in 2010 was the highest observed since 2007 with approximately 6 per gill net. A desirable size distribution was observed with the majority of individuals being 10-15" and a few over 25". Walleyes are typically stocked into Jeffrey but are not requested for 2011 due to sauger stockings.



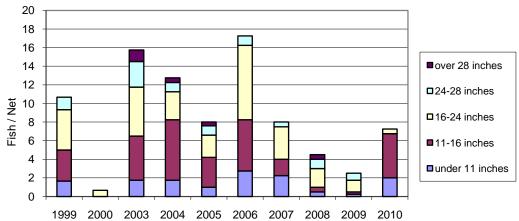
White bass are a cyclical species and the downward trend in gill net catch rate observed the last couple years appears to have turned around in the 2010 sampling data. Approximately 25 white bass were sampled per gill net with an average length of 10.5". White bass at Jeffrey should provide continued angling success and great table fare in 2011.

Hybrid striped bass per Gill Net by Length Group



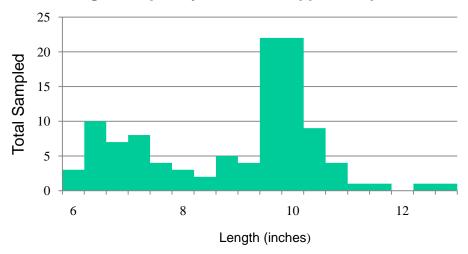
Hybrid striped bass catch rates had been consistent from 2007 to 2009 but were lower in 2010 with only one hybrid striped bass caught per gill net. These sampled individuals were less than 15". Jeffrey's hybrid striped bass fishery is managed to provide a low density population of large (>20") individuals and in many years these fish are observed. Hybrid striped bass (6,300 fingerlings) are requested to be stocked in 2011.





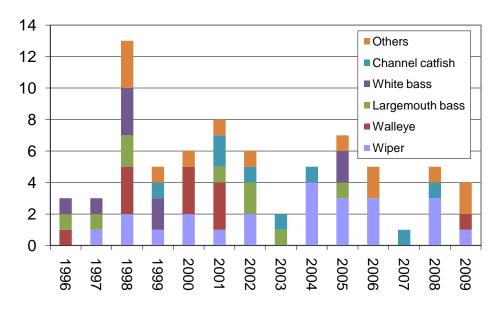
The 2010 channel catfish sample data reversed a decline in catch rate over the previous three years. Approximately seven channel catfish were sampled per gill net with an average length of 12.3".

Length Frequency of White Crappie Sampled



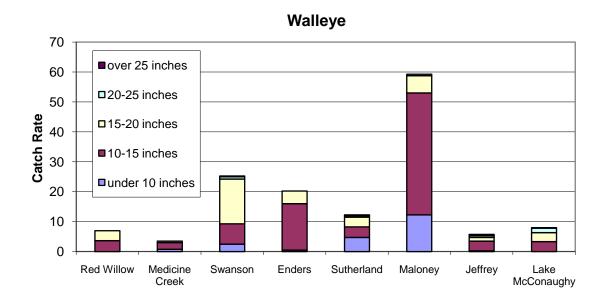
Although they are not sampled regularly, white crappie were sampled during the Fall of 2010 using modified trap nets. Mean length of sampled white crappie was 9 inches. This sample indicates that white crappie offer the potential for angling success. Black crappie were also sampled in lower numbers and small sizes.

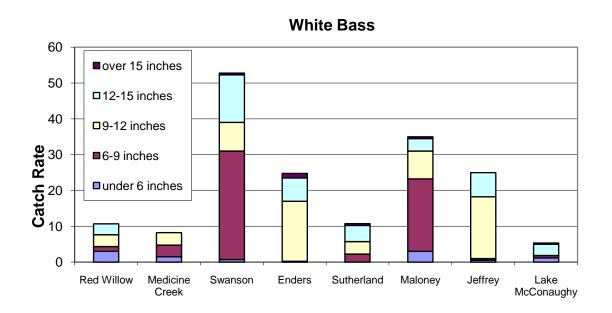
Master Angler Awards, Jeffrey Reservoir 1999-2009 (2010 data not yet available)



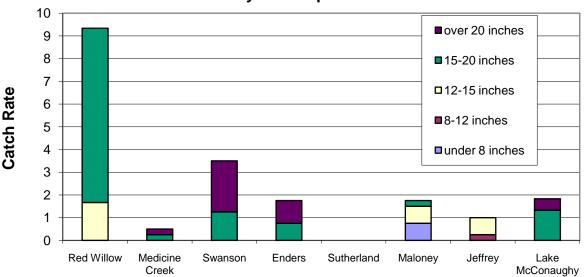
While the numbers of Master Angler awards given may not necessarily represent the true number of large fish caught (but not reported), the information is useful for evaluating catch trends. No one species of fish has dominated the Master Angler awards from Jeffrey, but wipers, largemouth bass, walleye, channel catfish, and white bass have made up the majority. Species in the "others" category include bigmouth and smallmouth buffalo, freshwater drum, flathead catfish, northern pike, black crappie, bluegill, and common carp. One walleye, one wiper and two flathead catfish were reported in 2009.

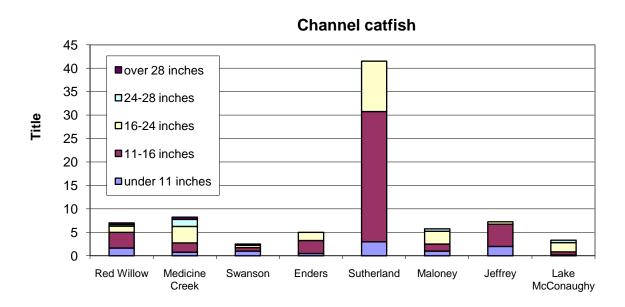
Southwest District Reservoir Standard Survey Comparisons from 2010 Gill Net Data











For additional information on fisheries management at Enders Reservoir contact:
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